

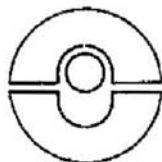
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**Technical specification
for the execution and control
of test joints in steel**

Test pieces



International Union of Railways



Documents

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R**Leaflet to be classified in volumes:**

- V - Transport stock
- VI - Traction
- VIII - Technical specifications

Amendments

Preliminary remarks:

A double vertical line (||) in the margin denotes modifications introduced on the date shown at the foot of the page.

Enforcement of this leaflet is governed by the provisions listed under "Application" at the end of this document.

Note

This leaflet forms part of a series which also includes:

- | | |
|----------------|--|
| Leaflet 897-12 | Technical specification for the approval of a procedure for arc-welding on steels |
| Leaflet 897-13 | Technical specification for the quality control of welded joints on rolling stock in steel |

1 - Purpose

This leaflet defines the approval conditions for the procedure description used for manufacturing test assemblies and sub-assemblies.

The procedure for manufacturing test assemblies and sub-assemblies must be approved according to the provisions of this leaflet.

Once a welding procedure has been approved, it may be used in manufacture.

Any manufacturing irregularity noted in production may be confirmed under the provisions of this leaflet.

2 - Test joints

2.1 - Definition

A test joint shall be an assembly including welded areas subject to large forces and/or to be executed under extremely difficult conditions (e.g. in terms of accessibility).

Such a test joint is referred to as a "mock-up".

It is the responsibility of the customer railway to request the production of test joints.

2.2 - Preparation of test joints

Test joints must be prepared in accordance with the provisions of UIC Leaflet 897-13.

R**2.3 - Execution of test joints**

Test joints shall be executed in the presence of a representative of the customer railway.

Weld test joints must be produced using approved welding processes as per UIC Leaflet 897-12 for class B and C welds.

The materials used and their thicknesses shall be the same as those to be used in the actual assemblies.

The preparation and protection of surfaces before or during welding and bevelling processes shall be carried out as prescribed for each part.

Welding must be carried out in accordance with the welding provisions contained in point 3.4 of UIC Leaflet 897-13. However, the use of final production mock-ups is recommendatory rather than mandatory.

Weld test joints must be produced using identical welding equipment and in accordance with the same operating conditions as for actual manufacture (welding process, filler product, position, parameters, etc.).

For each type of weld, welding must be halted and resumed once at an identified point.

If the difference between the maximum and minimum dimensions for lengths and root edges of weld preparations prescribed by the builder exceeds 1/10 of the thickness of the thinnest component in the assembly, it will be carried out on the test joint in order to obtain in one area the minimum length and the maximum root edge and in another area the maximum length and minimum root edge. These areas may be situated on separate welds but they must include the tacking prescribed for the actual manufacture of the parts.

Heat treatment, where prescribed, shall be carried out on the test joint under the same conditions as for manufacture before any control samples are removed.

2.4 - Examinations and inspections on test joints

The number and types of examinations and inspections to be carried out on the test joint are given in the following table.